## Abstract of the Disclosure:

5

10

The novel method and device provide for process control — closed-loop control or open-loop control — for a thermal system with an obstruction-curved and/or thick-walled component through which a medium flows. The wall temperatures of the component are detected, the heat flux density of the heat flux from the medium into the wall of the component is determined, the respective heat transmission coefficient is determined, using the wall temperatures. The heat flux density, and the heat transmission coefficient thus determined are used to influence the medium properties, with the heat stresses in the component being taken into account.

WHS:kf - Mp.Nr.03-530F//3/5/2004